



## Appendix 3 – Mitigation Measures

## State Significant Development

Upgrades to Chatswood Public School and Chatswood High School 5 & 24 Centennial Avenue, Chatswood

PLANNING, URBAN DESIGN, RETAIL AND ECONOMIC. HERITAGE

Mitigation Measures				
Environmental Impact	Mitigation Measure	EIS Section or Appendi		
Aboriginal Cultural Heritage	If suspected aboriginal objects are located, works must cease and an archaeologist called in to assess the find. DPIE (formerly OEH) must be notified under Section 89A of the EP&A Act.	Section 6.2.1 Appendix 10 Appendix 20		
Operational Traffic	Provide a shuttle bus service (50 passengers) to/from the school to service a wider, non-walkable area, where a large portion of students live subject to demand analysis.	Section 6.3 Appendix 21		
	Implement green travel plan to encourage staff and students to travel via alternative methods and provide initiatives to discourage single occupancy car trips			
	Consider additional parking restrictions on surrounding streets			
	Assign staff to enforce compliance of 5 minute parking and 'no parking' restrictions at drop off/pick up zones on Centennial Avenue.			
	Extend 5 minute parking zone along Jenkins Street could be extended further north to provide more spaces.			
	Inform parents of alternative drop off/pick up zones along Centennial Avenue to better distribute parking demand.			
	Stagger start and finish times for both schools as well as for students in different year groups			
Construction Traffic	<ul> <li>Site specific traffic control plan required. No construction vehicle movements during peak school drop off/ pick up times unless otherwise approved</li> <li>Construction vehicles to call site office on approach to ensure loading area is available within the site</li> <li>Provide on-site tool drop off and secure storage for construction workers</li> </ul>	Section 6.3 Appendix 21		
Tree Removal and Biodiversity	Implement tree protection measures for trees to be retained in accordance with AS 4970-2009 – Protection of Trees on Development Sites	Section 6.4 Appendix 14 Appendix 32		
	3 Eco system credits are required			
Operational Noise	Acoustic treatment of undercroft play areas to reduce level of reverberant noise build-up	Section 6.6.1 Appendix 25		
	Limit public address system and school bell to 80dBA at 3 metres from each speaker			
	Waste collection be restricted between 7.30am and 6pm Monday to Friday			
	Use of Multi-purpose halls restricted to daytime and evenings up to 10pm only.			
	Acoustic treatment of mechanical plant to meet noise emission criteria			
	All external walls at ground floor level may be of double brick or brick veneer construction. If lightweight walls are proposed, the following construction is recommended:			

Mitigation Measures				
Environmental Impact	Mitigation Measure	EIS Section or Appendix		
	<ul> <li>Hardies 'Linea' or 'Stria' cement composite cladding on battens fixed to 9mm cement sheeting on the outside of 90mm timber or 92mm steel studs; and</li> <li>25mm bulk insulation blankets between the battens; and</li> <li>Two layers of 16mm thick fire rated plasterboard on the internal side, with joints staggered; and</li> <li>Wall cavity lined with 100mm thick glasswool insulation</li> </ul>			
	All roofs may be on concrete slab construction, minimum 200mm thick. If roofs are proposed of metal deck construction, the following is recommended:  Pacific Highway  Heavy duty vapour barrier laid below roof; Ceilings under roof should comprise 16mm fire rated plasterboard with joints overlapped; Insulation batts (min 160mm glasswool) are to be placed between ceiling joists.  Centennial Avenue All roofs may be of metal deck construction Ceilings under roof should comprise one layer of 10mm standard plasterboard; Insulation batts (min 160mm glasswool) are to be placed between ceiling joists			
	Unless specified, window frames may be either sliding/awning or hinged casement style and be of robust sound barrier construction having interlocking stiles and neoprene or vinyl finned seals to minimise sound leakage. Schedule of glazed windows and door constructions is provided in Acoustic Assessment Report.			
	Mechanical ventilation should be acoustically treated to reduce noise emission level inside school buildings to criteria specified in Acoustic Assessment Report.			
Construction Noise and Vibration	Adhere to normal construction hours as per EPA	Section 6.6.2 Appendix 25		
	<ul> <li>Implement work practices where necessary and practical to reduce noise emissions including:         <ul> <li>Distance – where possible locate mechanical plant at maximum practical distance from residential receptors</li> <li>Enclosure – construct acoustic enclosures around items of mobile plant during extended use</li> <li>Screening – erect temporary sound barrier screens along the boundaries of the site adjacent to residential buildings throughout the construction</li> <li>Silencing – plant and machinery should be selected with consideration to low noise options where practical and available</li> <li>Acoustic monitoring throughout construction</li> <li>Periods of respite – works that result in impulsive or tonal noise emissions should not exceed continuous blocks of 3 hours and have an hour's respite between each block from 9am and 4pm Monday to Friday only.</li> <li>See Acoustic Assessment Report for details of noise reduction measures for plant and equipment, work practices, heavy vehicles and staff vehicles</li> </ul> </li> </ul>			
Erosion and sediment control	Implement erosion and sediment control plans	Section 6.8 Appendix 16		

Mitigation Measures		
Environmental Impact	Mitigation Measure	EIS Section or Appendix
Contamination	Pacific Highway site – implement Remediation Action Plan	Section 6.10 Appendix 12